SINGER®

Quantum® XL-6000

Feature and Benefit Chart

GENERAL INFORMATION	
Exclusive Automatic Thread Exchanger™	The Automatic Thread Exchanger™ automatically rethreads the machine between two alternating color thread spools during the embroidery process. This eliminates the need to rethread the machine after each color change.
Automatic Self-Threading	The sewing machine automatically threads itself from the top thread spool through the eye of the needle.
Pictogram and Icon Operation	All screens operate with easy to understand pictograms and icons.
Internet Upgradeable	With the ability to download from the Internet the Quantum® XL-6000 can be upgraded to the latest standards.
Full Color 3-D LCD Screen .	A color driver provides the ability to see designs in full color for easy visualization and selection of thread colors.
Ergonomic Position Screen	The slant of the screen makes viewing easier.
Full Color Touch Display Control	Self-evident Pictograms make operating the machine as easy as seeing and touching.
Full Color Error Guidance Function	Pictograms and word descriptions instruct operator immediately of an error and offer easy to understand solutions.
Full Color Help Screen	It is like having an sewing instruction book built right into the machine. Push the Help Screen key and a sewing adviser is there to answer questions.
Exclusive Sewing Odometer	The sewing odometer counts the stitches sewn by the machine. A helpful feature for knowing when to change needles or have the machine serviced.
Extra-Extra High Lift Presser Bar	The extra-extra high lift presser bar provides the ability to sew high loft quilt batting and other thick fabrics.

Computer Controlled Thread Tension .	An automatic computer-controlled thread metering system delivers the precise amount of thread for each needle penetration to create the optimal appearance of each stitch.
Top Thread Break or Supply Out Automatic Stop	The Quantum® XL-6000 immediately stops when it senses a thread break or if the top thread spool is empty. This prevents accidentally sewing with no top thread.
Drop Feed	The machine has a manual drop feed lever for quilting and other specialty sewing techniques. When setting up to embroider the feed dogs automatically drop.
Large Sewing Surface Area	The Quantum® XL-6000 has a large sewing surface area to accommodate bulky fabrics and large projects more easily.
Programmable Needle Up and Down	Select whether the needle is up or down when the machine stops. It is beneficial to have the needle stop in the down position when appliquéing, quilting or pivoting the fabric. Provides the ability to quickly and easily stop and pivot during sewing.
Automatic Thread Trimmer	With just the push of a button the top thread is brought to the fabric's underneath side and both threads are trimmed. This works with regular sewing, embroidery and even buttonholes! No need to always reach for scissors to trim threads. Choose whether to set the trimmer to automatic so that it will always trim at the end of a design or not.
22 Needle Positions	Needle position can be changed for individual projects, such as inserting zippers or cording and topstitching.
Knee Lifter	The knee lifter raises the machine presser foot for hands-free positioning and pivoting of fabric.
Hand Speed Control	Sew without the foot controller both in regular and embroidery mode. This also regulates the sewing speed for more control.
52 Total Memory Cells in the Machine	32 long term memory cells for the embroidery mode and 20 long-term memory cells for standard sewing.

Ability to Combine 120 Characters	The machine has the ability to string up to 120 characters or letters. This is a great feature when sewing lettering combinations.
Postpone Sewing Power Off Function	A design can be saved and retrieved at a later time.
Power Fail Function	If there is a temporary power failure during editing or sewing of the embroidery design, the work will be temporarily saved.
DC Motor	This powerful motor is quiet and operates with little power consumption.
Optimum Power Control	This is a SINGER® name for a control system that senses when additional power is required to maintain speed through thick or changing fabric conditions. This feature is most useful when sewing through multiple (6-8) layers of fabric.
Electronic Stitch Formation	All stepper motors are electronically controlled. Digital electronic control of the stepper motors that control the pattern formation allows for perfectly formed patterns every time.
Aluminum Frame	The internal skeleton of the sewing machine. This rigid support holds all the mechanisms in perfect alignment for perfect, skip-free sewing.
Halogen Bright Lighting	The halogen light provides better distribution of light eliminating “dark” spots on the fabric.
Box Feed	This is a feed dog motion that moves the feed dogs in a box motion, rather than the historic arc motion. Box motion assures perfect feeding throughout the entire feed process, as the feed dogs are always in perfect and equal contact with the fabric and presser foot.
	More people own SINGER® machines than all other brands combined.
25 Year Limited Warranty	The Quantum® XL-6000 has a 25-year limited warranty including 25 years parts, 5 year electronic and 1 year labor.

SEWING FEATURES	
Exclusive Top Loading Jam-Proof Bobbin Winding System	A historical SINGER® 40+ years exclusive feature. Wind the bobbin from the upper needle thread without having to rethread the machine. The bobbin loads from the top so it is easy to insert.
Wind-in-Place Bobbin System	In the standard sewing mode the machine winds thread from the top spool directly to the bobbin.
Variety of Built-In Stitches	A full variety of built-in stitches including Cross stitches, Heirloom, Decorative and Utility stitches.
Quilting Stitches	The quilting stitch is an ingenious stitch that creates the look of hand quilting. The stitch length can be adjusted for custom stitching.
5,10,15 and 20mm Basting Stitch Length	Speed basting is fast and easy. Make trial fittings and temporary seams that can be effortlessly taken out. Use it to also baste quilt layers together.
Two-Color Sewing	Sews selected patterns in two colors for a customize look.
Professional Overcasting/ Overlocking Stitch	There are 4 Overcasting stitches, one is especially suited for heavy fabrics.
4 Built-In 7mm Alphabet Fonts	Choose from 4 fonts to personalize projects by adding a monogram, name or phrase with one of the built-in alphabets. Each font can be made in upper and lower case, as well as numbers.
25mm Script Embroidery Fonts	String-along large 25mm script letters to effortlessly personalize projects.
Sideways Feed	Sew in multiple directions without having to pivot the fabric. This is especially helpful when sewing items such as pockets.
Mirror Image, Reverse Image and Stitch Elongation	Mirror, reverse and/or elongate to custom-ize the stitch. The stitch can be elongated in 1x, 2x, 3x, 4x, 5x and 10x increments without losing density.
25mm Script Embroidery Fonts	String-along large 25mm script letters to effortlessly personalize projects.
Single Pattern Tie-Off	No problem with raveling on patterns and alphabet letters. Just push a button and the last stitch is reinforced.

15 Precisely Balanced One-Step Built-In Buttonholes	Choose from 15 different one-step buttonhole styles, including a Purl Stitch Buttonhole. Buttonhole sewing is a one-step simple process, providing reliable results. Each side of the buttonhole is sewn in the same direction - creating beautifully balanced buttonholes.
Exclusive Buttonhole Foot Underplate	This is a SINGER® developed system that sandwiches the fabric between a lower plate and the foot, to ensure perfect buttonholes in multiple layers of fabric. Effectively, this is like a mini-embroidery hoop in which the machine feeds the attachment, rather than the fabric. It makes possible to create buttonholes in places that conventional buttonhole devices cannot easily reach.
EMBROIDERY FEATURES	
Continuous Hoop and Continuous Design Card #5006 are Standard Accessories	A Continuous Hoop for embroidering continuous border designs. A Smart Media Card with continuous hoop embroideries is included in the package. Endless borders are now both beautiful and trouble-free!
Direct Computer Interface via Conversion Software (included with machine)	The Conversion Software is a tool designed to allow easy and direct transfer of pre-digitized embroidery designs from the PC to the Quantum® XL-6000. The direct computer interface allows for downloading today's most popular home embroidery design formats from the Web to the Quantum® XL-6000. You can also use design collections sold on CD or floppy, and send them directly to your machine. Basic editing functions are included, such as clean up, center or change a design's color.
Endless Bobbin™	In the embroidery mode if the machine runs out of bobbin thread during embroidery, it stops, automatically rewinds the bobbin, and then continues to embroider the design. Never worry about running out of bobbin thread.
Accepts up to 128 Colors in a Single Hoop	Allows single designs to be sewn in up to 128 colors.

10” x 18” (250mm x 450mm) Multiple Hoop On-Screen Layout	Multi-Hooping with FPS™ Technology – create embroideries larger than the largest hoop by rehooping the fabric while ensuring precisely matched designs. Multi-Hooping with FPS™ Technolgy (Fabric Positioning System) works on the same concept as GPS (Global Positioning System). By identify three points on the fabric, the Quantum® XL-6000 is able to triangulate the position of the fabric in the hoop and adjust the embroidery accordingly. This allows for hooping the fabric “incorrectly”, but sew a perfectly embroidered multiple hoop embroidery creation every time. Although the technology is advanced, the operation is simple.
3 Hoops Included	Large, medium and small size embroidery hoops are included.
Full Color Embroidery Image	Makes it easier to visualize design, select thread and sew.
Over 100 Built-in Embroidery Floral Designs	A large selection of beautiful floral designs, borders, and frames are built into the embroidery section of the machine.
Built-In Monogram Motifs and Frames	The Quantum® XL-6000 offers a wide variety of creative monograms and frames.
Built-In Large Floral Accented Monogramming	Beautiful large monogramming in two sizes with numerous floral accents are perfect for sewing one-of-a-kind monograms on clothing and home decorations.
Letter Size up to 60mm with Unlimited Rotation	Letters built into the machine can be sized up to 60mm for use in creative projects.
Vertical and Horizontal Positioning for Lettering	Letters can be positioned on screen either vertically or horizontally.
Built-in Embroidery Resizing	Embroidery patterns can be resized directly in the sewing machine from 90% to 120%.
Unlimited Increment Rotation	The ability to easily rotate designs and letters in 1-degree increments for perfect positioning.

Embroidery Pattern Size Adjustment 90% to 120%	Make quick modification of the design's size. As the size is modified the stitch count recalculates, providing for accurate stitch density.
Mirror Image	With just a touch of a button, designs can be mirror imaged.
Kern Spacing Function	It is easy to change the spacing between kern letter combinations to create optically pleasing lettering.
On-Screen Pattern Layout, and Editing	Layout and edit complex designs from the built-in designs, Smart Media Cards and/or a downloaded design. View the design and any changes before beginning to sew.
On-Screen Grids	Build-in grids allow easy, quick, and professional layouts of Alphabet and combination designs.
Skip Segment/Step Sewing	It is easy to skip stitches or segments forward or back-up while stitching a design. An unique system allows accurate movement to the exact area for embroidering.
On-Screen Information	Quantum® XL-6000 advises the best hoop size for embroidery, confirms the pattern area, and detects errors.
Up to 800 stitches per Minute Embroidery Speed	The Quantum® XL-6000 will sew up to 800 stitches per minute during embroidery.
Uses Smart Media Cards	The Quantum® XL-6000 uses Smart Media Cards for storing designs and can be inserted directly into the machine. Add-on options like our embroidery design cards and state-of-the art Professional SewWare™ 2.00a give you access to even more designs.
Embroidery Unit Carry Case Included	A case is included with the machine to store and protect the embroidery unit.

Accessories	
Accessories included with the Quantum® XL-6000	Embroidery Unit Embroidery Frames (3) Embroidery Accessory Bag Continuous Embroidery Frame Continuous Embroidery Card Knee Lifter
Included Accessories (Over $400 Value)	<u>Accessories in Auxiliary Bed and Bag</u>: Auxiliary Spool Pin and Felt Overcasting Foot Blindstitch Presser Foot Zipper Foot Invisible Zipper Foot Rolled Hemming Foot Button Sewing Foot Decorative Stitch Foot Quilting Guide Cording Foot Embroidery Foot Even Feed Foot Buttonhole Foot with Underplate Transparent Buttonhole Foot Standard Presser Foot Bobbin Winder Guide for Embroidery Thread Bobbin Winder Shaft Thread Spool Caps Needles and Bobbins Tweezers and Screwdrivers Lint Brush and Seam Ripper Eyelet Punch Assistant Marker (Fabric Marker)

SINGER® and Quantum® are registered trademarks, and Endless Bobbin™, FPS™, Professional Sew-Ware™ and Automatic Thread Exchanger™ are trademarks, of the Singer Company Ltd. or its affiliates.